

## Submission to Modification 4 of the Narrabri coal Seam Gas Utilisation Project.

Sir/Madam

As an introduction, I will make the following observation based on the scant information contained in the 7 page (908.7 KB) Modification 4 Application currently before the Department of Planning.

**This Modification, if granted, is so open ended that it has the potential to be so big as to over shadow any proposed gas development in the state of NSW and as such should be subject to a full Environmental Impact Statement (EIS) not just a minor Modification review.**

### General observation and submission to Modification 4

It is also my belief that this Modification 4 Application as submitted by Santos under the guise of “beneficial use”, amounts to nothing more than a request to the NSW Department of Planning to approve, in principle, and sanction, without any environmental, community consultation and/or justification documentation, much of the infrastructure and wells required for the Narrabri Gas Project and later expansion of other Gas Projects within PEL 238, and as a result this Modification 4, if approved will put undue pressure on other approving bodies to approve any CSG related activity within PEL 238 without having to go through the proper and rigorous approval processes.

As if to reinforce the statement above you only have to look at the condition 1.4A that was part of the Modification 3 approval (this can be seen on the upper portion of page 2 of the Modification 4 document). In brief 1.4A stipulated that the gas supply for the Wilga Park power station had to come “*from existing or future wells within PAL 2 and PPL 3*”. And a time limit of 3 years was imposed upon the receipt of gas for use at the Wilga Park power station from the existing wells in PAL 2. A 3 year time limit for the supply of gas to the Wilga Park power station was also placed upon any future wells within PAL 2 to take effect only after these wells had been drilled.

Modification 4 will, I presume over turn condition 1.4A for the Modification 3. So now where does that leave the approval for Modification 3? Modification 3 has already been constructed.

In Modification 4, page 5, section 4, “Justification for modification”, Santos claims: that as a result of the increased gas availability to the 40 MW Wilga Park power station this “*would not result in additional noise, air emissions and environmental impacts beyond those that were considered in the Narrabri Coal Seam Gas Utilisation Project (the original Environmental Assessment) and the associated assessment documents*”.

### **Where is the documentation to support the above claim made by Santos in Modification 4?**

Even at the current 12MW level of power generation there have been noise complaints lodged concerning the Wilga Park power station.

The NSW Gas Plan and other Gas related Policies/Reports, set high and current standards for all the gas activities in NSW. The Gas Plan and any other Gas related Policy/Reports are ‘current science based’ most commonly expressed as ‘world best practice’ and rightly so, yet Santos claims that the science based reports around air, noise and the environment done in 2008 concerning the Wilga Park power station are adequate and infer that they do not need to be revisited.

Time moves on and so does the research and findings into noise, air emissions and environmental impacts levels that are acceptable in today's world. Eight (8) years is a long time and many advances have been made in these fields, so if the Regulations and Acts can be amended to accommodate a change of conditions that are only 2 years old then certainly the Original 2008 Environmental Assessment and associated documents should also be revisited as part of this Modification 4.

This out dated thinking by Santos, can be likened to Santos using 2008 standards for Gas drilling activities and the associated methods of produced water disposal, in 2016, we all know and so does Santos that what was permitted by the accepted standard in 2008 would never be acceptable or permitted in the 2016 standards.

#### Submission continued

Not long ago a member from an organisation attached to the Federal Government with connections to the NSW CSG Industry informed me *"That you cannot make assumptions from material found in written documents"*. As there is very little to no information either from the actual Modification application or from the NSW Government web sites (see below) to substantiate the claims made in the Modification, assumptions have to be made otherwise there would be no point in submitting and asking for a correct process to be followed.

If this Modification is granted as the wording in the application stands, Santos can supply gas for any purpose provided it is for "BENEFICIAL USE". Taking this to what I consider to be the, the logical finite conclusion, Santos can provide gas from the Exploration Pilot and other wells, so designated with the word "Pilot" or words of similar meaning, both existing and yet to be approved, for any use, all and they have to do is say it is for "Beneficial Use". Santos can then twist that around to say, of Benefit to NSW and claim that NSW needs the gas or it will be short of gas as they have in the past and because there is no definition of "beneficial use" in either the NSW Petroleum (Onshore) Regulation 2007 or the NSW Petroleum (Onshore) Act, they will be allowed to do what they want with this gas.

The Wilga Park power station with its small amount of power that it currently being generated and its maximum power generation potential, along with the admission that the current practice of 'flaring the gas is not good for the environment', are the only quoted justification Santos has made to request the approval of this Modification 4, the latter reason most probably being the most important issue.

A number of key words are used by Santos but no Legislative definitions are provided these words are: *Beneficial use, thresholds, limitations and criteria*.

I have looked at both the current amended Petroleum (Onshore) Regulation and the Petroleum (Onshore) Act for a definition of 'Beneficial Use' and noted there was none. I contacted the legislation Office to see if there was something I had missed, that Office confirmed that there was no definition, and referred me to the Department of Resources and Energy, where I was put in touch with the Titles Services who assisted my request concerning the definition of 'Beneficial use' as referred to in the 13 A of the current Petroleum (Onshore) Regulation 2007. I was sent a link to the below Department of Industry Resources & Energy NSW Gas Plan legislation Update page, a 'snip' and the provided link are included below.

<http://www.resourcesandenergy.nsw.gov.au/about-us/news/2016/nsw-gas-plan-legislation-update>

## Beneficial use of gas

Also commencing on 18 December 2015 is new legislation that will allow petroleum prospecting operators to use gas that is released during prospecting operations, albeit within strict thresholds and limitations. This delivers on better environmental outcomes.

These key words and phrases in the Modification 4 application have to be sorted and defined/explained as does the wording of *"the right to the beneficial use of gas conferred by section 28B of the Act is limited to a period of 1,000 days (whether or not consecutive) per well, in total, and"* as seen in 13A clause (2) sub paragraph (a) of the Petroleum (Onshore) Regulation, and what effect any approval of this Modification might have on any REF or similar lesser approvals if the requests made in this Modification were to be approved, in other words *"Does the granting of approval to Modification 4 constitute a 'relevant development consent' and all that goes with it as outlined in the Petroleum (Onshore) Act 2007 Part 7 Royalties"*.

Until these words and phrases are properly and legally defined as to their use in either the Petroleum (Onshore) Regulation and/or the Petroleum (Onshore) Act, then the Modification 4 application will be open to all sorts of interpretations as will be noted later in this submission.

#### 1. Response to Modification 4 application document.

Over the course of the previous two Modifications to the Narrabri Coal seam Gas Utilisation Project (Wilga Park) which Santos has been involved with the size of the documents have declined from 2869 KB and 44 pages to 1155 KB and 11 pages to now being only 908.7 KB and 7 pages.

This Modification 4 involves much much more than the water transfer that was modification 2 and yet the Modification 4 document has no substance or documented information to justify any of the Application instead the Modification relies solely on the wording of the amendment 13 A in 2015 of the Petroleum (Onshore) Regulation 2007, and some very unrealistic unsubstantiated claims about “minor pipeline modifications”. Some of the Pilots indicated on page 3 have no pipelines to them while others have produced water only pipelines, as for the future wells; well they have nothing not even a location.

The Modification 4 Application is only six (6) pages in size, seven (7), if you include the full page cover with the first one and three quarter pages explaining the history of and past modifications to the Narrabri Coal Seam Gas Utilisation Project Part 3 A., page 3 is only a quarter page, page 4 is a figure with exaggerated existing gas features indicated, page five is a full page with very little to no detail and page 6 is only three quarters of a page with some unsubstantiated claims made in the conclusion. These listed benefits of the project may be a contravention of the ‘implied spirit’ of the NSW Gas Plan when it comes to claiming any form of benefits to the local or state communities from the Modification (unsubstantiated claims – see dot points 1,2 and 4).

In the Modification Santos wants the Department of Planning to approve the use of gas obtained from any gas well put down under the lesser Environmental and Regulation rigor that is the Review of Environmental Factors (REF) with this Modification to apply “*to any existing or future approved pilot well within PEL 238*”. I have to ask why? Again a lack of detail in the application makes this question relevant and must be answered in a more substantial Modification 4 Application document.

#### 1a. Extent of works concerns

Santos also wants this modification to reword the 2009 Part 3A approval so that they can utilise the gas from any well existing or future approved within the boundaries of PEL 238, and they indicate that this gas will be used in the Wilga Park power station *with minor pipeline modifications and not result in an increase to the environmental impacts*”. This is a pure fabrication, much of the vast area of PEL 238 and this includes areas of the Pilliga Forest and Farm land have never been ground surveyed let alone been subjected to an REF approved Core Hole or Pilot well, there certainly are no produced water or gas pipelines other than those shown on the map included with the Modification Application (See the map on page 4 of the Modification Application. I may also add that the size of the pipelines and to well sites has been over exaggerated with the possible intention to attempt to mislead the Department as to the extent of the already approved development). So where is Santos’ information to justify these statements? There are certainly no Environmental Reports or other justification documentation provided.

#### 1b. Environmental impact concerns.

The application also states on page 5 under 4.1 Government Policy “*The objective of the amendment was to deliver on better environmental outcomes by not flaring gas where there is a viable opportunity to use the gas beneficially*”.

This is a very bold and potentially damaging to a lot of reputations statement and yet there are no reports, studies to substantiate the claims made.

**The community needs to see the Environmental and other reports that show that flaring gives a poorer environmental outcome than using the gas “beneficially”?**

If these reports cannot be produced to substantiate the claim made concerning the environmental outcomes of ‘flaring-v-beneficial use’ then the creditability of Santos, the NSW Government its Departments, especially DRE and the Department of Planning and the lead regulator the EPA, the NSW Gas Plan will forever be zero in the eyes of many within the community.

For years now sections of the Community have been questioning the validity of the environmental benefits of flaring the extracted gas, Santos’ Modification 4 application now vindicates that view. Santos or the NSW Government Departments will not release any reports into the content that makes up the extracted gas nor will they release any reports on the gases and particulate matter produced during and after flaring, this application indicates that there is a known problem with the resultant products of flaring. Hydrogen Sulphide has been smelt by many locals and others around the gas collection sites and from various hi-point vents both in the past and currently. The regulating body had been informed, but could find no detectable gas when they did their spot checks. There is no permanent direct monitoring for this gas at any water or gas gathering/flaring site in the entire PEL238, according to the EPA the cost of such monitoring devices would be huge. And now Santos has applied to burn this gas in internal combustion engines.

Where is any information regarding exhaust gas emissions from the Wilga Park power station as a result of burning this gas in the internal combustion engines that make up the Wilga Park power station? These need to be included as the original data contained in the 2008 Part 3 A Narrabri Coal Seam Gas Utilisation Project would be out of date and not to Worlds Best Practice standards and again be contrary to the “spirit” of the NSW Gas Plan.

There needs to be a requirement, in any approval of this modification 4, for these permanent monitors to be installed and the data obtained made public in real time.

If Santos were fair dinkum about fully applying to the amended *Petroleum (Onshore) Regulation 2007* then they would have shut down the flare at Bibblewindi and the flare located at Wilga Park earlier this year and diverted the gas to the Wilga Park power station. If the gas available was in excess of requirements then the supplying gas wells could have been “shut in”, unless there is a problem with the well and well head integratory and structure.

1c. Economic and Social Benefits concerns

My reading of the Petroleum (Onshore) Act 2007 under the section titled Royalties, I believe will Santos be liable for the payment of Royalties on the coal seam gas used ‘beneficially’ and not flared or vented or used in any other way other than to enable the recovery of the coal seam gas from the coal seam or other natural containment area. If royalties are payable and Santos contributes to the recently approved Regional Community Benefit Fund then the proposed modifications will be of some social and economic benefit to the wider Narrabri local government area, if no royalties are payable then this modification will be of no real benefit to the wider community of the Narrabri local government area as the only beneficiaries will be Santos and its employees and the few local contractors already engaged by Santos. In other words nothing really changes except that Narrabri Council has a bigger unfunded infrastructure maintenance bill, something that will be passed onto the ratepayers and other uses of Council services.

The Modification 4 mentions only benefits to the Narrabri local government area, but there are other local government areas, be they be only small portions, that are in PEL 238, so they are entitled to some of the returns if there are any.

2. General concerns

A mentioned there is no specific definition of “beneficial use” and as such there remains the doubt over the true intention of the modification. Santos has been at pains to say state the words Wilga Park power station in relation

to the destination of the gas from the existing and future approved pilot wells from within PEL 238, but the simple fact remains that the volume of gas wells/Pilots in PPL3 and PAL 2 that are currently in operation and supplying Wilga Park if utilised correctly and not flared as is the current practice, would have allowed Wilga Park to increase in size.

So why has that not occurred and it is only now that Santos applies for the Modification 4, why not 6 months ago after all the amendment has been in place since 18<sup>th</sup> December 2015 (see earlier provided link).

The list of existing pilots and wells that Santos wants to be included immediately is also interesting in that some have partially built gas infrastructure approved under REFs and EIS attached and some have no infrastructure at all other than the well heads and fenced pads. What I cannot understand is why after all this time these wells and Pilots are listed for their gas to be used in the Wilga Park power station, when there is no notification application in for any upgrade of the generating capacity above the current 12 MW's as any increase will mean increased and more extensive monitoring and possibly new conditions on the existing EPL. If these Pilots and wells were to be approved as per Modification 4 then there would be an oversupply of gas to the power station with Santos either having to shut the wells in or flare and that defeats the purpose of the power station which was to evaluate the gas fields capacity.

There is another explanation and that is the Gas availability is not as good as first thought and extra gas over and above those already supplying the power station is required to keep the power station running. Santos alluded to this in discussions at the August Narrabri Gas Project CCC. (My notes of that conversation are included below)

"August 2016 Narrabri Gas Project CCC meeting notes by P4P delegate  
(My comments are in Italics)

Santos Activity Update.

There is an extra section added to the update. This being Santos intends to submit an application to use the gas from the Tintfield gas field in the Wilga Park power station instead of flaring it as they are doing now. The explanation given was that last year there was a change to the P (O) Act to enable gas reserves under exploration to be used in order to prove a resource and because the gas generator for the Leewood RO Plant will require gas there will not be enough for the power station. *(No mention of reducing the flaring of gas at Bibblwindi to provide the extra gas required. Bibblwindi is in a PAL while Tintfield is not in any existing formal Assessment or Production Lease area. This could be the thin edge of the wedge to allow Santos to move all their existing gas wells to providing gas to the Wilga Park Power Station in the guise of 'proving the resource' to earn money for the planned gas field and Power station expansion).*

In answer to a question on how much work was involved, the Santos delegate said that only one metre of gas pipeline had to be put in place to enable this gas to go to the power station. (Eastern Star Gas had been using the gas from the Tintfield gas field in the power station without approval and when this was brought to Santos' attention they cut the supply to the power station and built the flare. This is why no major pipe line work is required)

An email as well as the Santos Monthly Update was circulated via email on the 9th of August 2016."

There are concerns around the exact meaning of clause (2) (a) of 13A beneficial use of gas and how this clause in conjunction with the "beneficial use" of gas obtained from exploration may be used to establish an oversupply of under used gas wells whose main stated purpose in the REFs was to supply gas for "beneficial use". This modification needs to stipulate the maximum number of wells where the gas can be used for "beneficial use" utilising the 1,000 day (whether or not consecutive), provision.

Taking the above to the nth degree if this Modification were to be Approved as it stands and the gas companies use to 1,000 days non-consecutively, then when a exploration well was approved under an REF and the well drilled and the necessary infrastructure put in place to enable the gas to get to the Wilga Park power station, that

exploration pilot/well could have beneficial use life of say 50 years, if the pilot/well only supplied beneficial gas for 20 days per year. This then could lead to the development of a production gas field with all infrastructures in place under the less rigorous Approval system of the Department of Resources and Energy with only a simple application to the Department of Planning needed to move that established and approved exploration field into full production.

No current Environmental Assessments produced to substantiate claims re the claims of no additional noise, air emissions and environmental impact will result in the ability to have enough beneficial use gas to be able to run the Wilga Park power station at the approved capacity of 40MW. Santos wants you to believe that studies 8 years old are as good as those done today, well if that is the case why has the Gas Plan been put in place with all its progressive requirements? Santos must redo these impact studies and present them in a new Modification 4 Application. Also as this would constitute a new version on the original Narrabri Coal Seam Gas Utilisation Project document, the document should go up for public viewing for the prescribed period with the public invited to submit.

This Modification 4, because of its potential both stated and implied to extend the existing exploration pilot well program to be over the whole of PEL 238 along with the 'beneficial use' of the gas from the pilots, should have also gone on Public display for the prescribed period with the public invited to submit.

It is unsure as to the level of social and economic benefit if any that this Modification 4 would bring to the Narrabri local government area or to any neighbouring local government whose local government area is also in PEL 238

There are enough reasons, I am sure that the community will produce more in there submissions, to reject this Modification 4 Application as it currently stands and ask for a resubmission that contains, recent noise, air emission and environmental impact studies not only for the Wilga Park power station but for the entire PEL 238, seeing how Modification 4 has now moved away from coal seam gas supplied to the Wilga Park power station from just PAL2 and PPL3 to requesting that all pilot wells current and future build within PEL 238 be allowed to supply gas for "beneficial use" in the Wilga Park power station.

**As a final statement regarding the Modification 4: This Modification, if granted, is so open ended that it has the potential to be so big as to over shadow any proposed gas development in the state of NSW and as such should be subject to a full Environmental Impact Statement (EIS) not just a minor Modification review.**

**If Modification 4 is approved as it is written and presented, without any substantive supporting evidence except for a complete reliance upon a recent Amendment to the *Petroleum (Onshore) Regulation 2007* and the governing *Petroleum (Onshore) Act 2007*, then it will have severely damaged the creditability and independence and accountability of not only Santos, but the whole of the NSW Government, its Departments and Regulators as well as the very Legalisation and Policies that were put in place to properly protect the environment and the people of NSW.**

Thank you

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24<sup>th</sup> October 2016